

## Pinus ponderosa / Schizachyrium scoparium Wooded Herbaceous Vegetation

COMMON NAME	Ponderosa Pine / Little Bluestem Wooded Herbaceous Vegetation
SYNONYM	Ponderosa Pine / Little Bluestem Savanna
TNC SYSTEM	Terrestrial
PHYSIOGNOMIC CLASS	Herbaceous
PHYSIOGNOMIC SUBCLASS	Perennial graminoid vegetation
PHYSIOGNOMIC GROUP	Temperate or subpolar grassland with a sparse tree layer
FORMATION	Medium-tall temperate or subpolar grassland with a sparse needle-leaved evergreen or mixed tree layer
ALLIANCE	<i>Pinus ponderosa</i> Wooded Medium-tall Herbaceous Alliance
CLASSIFICATION CONFIDENCE LEVEL	2

### RANGE

This community is found in western Nebraska and western South Dakota.

#### *Scotts Bluff National Monument*

This community occurs at the tops of ridges and bluffs, especially South Bluff.

### ENVIRONMENTAL DESCRIPTION

#### *Globally*

This community is found on loamy, sandy, or rocky soil. It is usually found on gentle to moderate slopes at low elevations in the Black Hills of South Dakota (Hayward 1928).

#### *Scotts Bluff National Monument*

This alliance is found on bluffs, ridge tops, and upper slopes, typically above 4100 feet.

USFWS WETLAND SYSTEM Not applicable

### MOST ABUNDANT SPECIES

#### *Globally*

<u>Strata</u>	<u>Species</u>
Tree canopy	<i>Pinus ponderosa</i> , <i>Juniperus scopulorum</i>
Shrub	<i>Juniperus scopulorum</i>
Herbaceous	<i>Schizachyrium scoparium</i> , <i>Stipa comata</i> , <i>Carex filifolia</i> , <i>Bouteloua gracilis</i> , <i>Bouteloua curtipendula</i>

**USGS-NPS Vegetation Mapping Program**  
**Scotts Bluff National Monument**

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<u>Strata</u>	<u>Species</u>
Tree canopy	<i>Pinus ponderosa</i> , <i>Juniperus scopulorum</i>
Herbaceous	<i>Bouteloua gracilis</i> , <i>Stipa comata</i>

**DIAGNOSTIC SPECIES**

*Globally*

*Pinus ponderosa*, *Schizachyrium scoparium*

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*Pinus ponderosa*, *Bouteloua gracilis*

**VEGETATION DESCRIPTION**

*Globally*

This community has scattered mature trees with a fairly continuous graminoid understory. *Pinus ponderosa* is the most abundant tree species, sometimes with *Juniperus scopulorum* present as small trees or tall shrubs (Steinauer 1989). The most abundant graminoids in the understory are *Schizachyrium scoparium*, *Stipa comata*, *Carex filifolia*, *Bouteloua gracilis*, and *B. curtipendula*. *Calamovilfa longifolia* and *Koeleria macrantha* may be found on sandy soils in the eastern part of this community's range. Forbs that may be present include *Gaura coccinea*, *Psoraleidum lanceolatum*, and *Asclepias pumila*. In addition to the herbaceous species, shrubs such as *Symphoricarpos occidentalis*, *Rhus trilobata*, and *Cercocarpus montanus* are sometimes found in this community.

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This community is dominated by mid and short grass herbaceous species. These include *Bouteloua gracilis* and *Stipa comata*. There is a sparse tree canopy of *Pinus ponderosa*, sometimes with *Juniperus scopulorum*. *Juniperus scopulorum* occurs as a shrub, too.

**OTHER NOTEWORTHY SPECIES**     Information not available.

**CONSERVATION RANK**   G2G3

**RANK JUSTIFICATION**   Information not available.

**COMMENTS**

Periodic fires are probably important in maintaining the open grassland understory of this type.

*Scotts Bluff National Monument*

This community can grade into *Pinus ponderosa* / *Juniperus scopulorum* Woodland or *Stipa comata*-*Bouteloua gracilis*-*Carex filifolia* Herbaceous Vegetation.

**REFERENCES**

Hayward, H. H. 1928. Studies of plants in the Black Hills of South Dakota. Botanical Gazette 85(4):353-412.

Steinauer, G. 1989. Characterization of the natural communities of Nebraska. Pp. 103-141, in, M. Clausen, M. Fritz, and G. Steinauer. The Nebraska Natural Heritage Program, Two Year Progress Report, Appendix D. Lincoln, NE.